Having now described my invention and the manner in which it may be used, I claim:

1. A compound archery bow comprising a pair of flexible resilient first and second bow limbs with a handle connecting the inner ends thereof,

a cam journaled at the first bow limb end,

a rotational member journaled at the second bow limb end and having at least one peripheral groove portion therein,

a cable, having an intermediate portion trained around the rotational member to form first and second cable sections,

an anchor cable extending between the first and second bow limbs having one end fixed to the bow limb on which the rotational member is journaled and the other end secured to the cam,

said cam having at least one eccentric groove for taking up the anchor cable as the bow is being drawn and having means for feeding out the two cable sections as the bow is being drawn, and

means for securing the ends of the first and second cable sections and the anchor cable sections to the cam.

2. A compound archery bow as set forth in claim 1 wherein the rotational member is a pulley.

3. A compound archery bow as set forth in claim 1 wherein said first cable section forms a bowstring.

4. A compound archery bow as set forth in claim 1 wherein the

means for securing the ends of the first and second cable sections and the anchor cable section to the cam are anchor pins located on the cam.

5. A compound archery bow as set forth in claim 1 including means permitting an end of at least one of said cable sections to be lengthwise adjustably secured to the cam.

6. A compound archery bow as set forth in claim 1 wherein the means for feeding out the two cable sections as the bow is being drawn comprises at least a first additional groove and a second additional groove on said cam.

7. A compound archery bow as set forth in claim 6 wherein said first and second additional grooves have different peripheral lengths and wherein the first cable section is received in the first additional groove and the second cable section is received in the second additional groove.

8. A compound archery bow as set forth in claim 7 wherein said first additional groove has a larger peripheral length than said second additional groove, and wherein said first additional groove is located between said second additional groove and said eccentric groove of said cam.

9. A compound archery bow as set forth in claim 7 wherein the eccentric groove for taking up the anchor cable has a different peripheral length than said first and second additional grooves.

10. A compound archery bow as set forth in claim 7 including means permitting an end of at least one of said cable sections to be

lengthwise adjustably secured to the cam.

11. A compound bow as set forth in claim 10 wherein said means permitting an end of at least one of said cable sections to be lengthwise adjustably secured to the cam are anchor pins on the cam.

12. A compound archery bow as set forth in claim 1 wherein the means for feeding out the first and second cable sections as the bow is being drawn includes the eccentric groove which takes up the anchor cable section as the bow is being drawn.

13. A compound archery bow as set forth in claim 12 wherein the means for securing the ends of the first and second cable sections and the anchor cable section to the cam is an anchor pin on the cam.

14. A compound archery bow as set forth in claim 1 wherein the means for feeding out the first and second cable sections as the bow is being drawn includes an additional groove in the cam.

15. A compound archery bow as set forth in claim 14 wherein the additional groove in the cam is eccentric.

16. A compound archery bow as set forth in claim 15 wherein the first and second cable sections are secured to a first pin on the cam.

17. A compound archery bow as set forth in claim 14 wherein the anchor cable section is secured to a second pin on the cam.

18. A compound archery bow as set forth in claim 6 wherein said eccentric groove is located between said first additional

groove and said second additional groove on said cam.

19. A cam for use in a compound archery bow having means thereon to feed out a first cable section and means thereon to feed out a second cable section.

20. A cam as set forth in claim 19 wherein said means to feed out the first cable section and means to feed out the second cable section comprise first and second grooves having different peripheral lengths.

21. A cam as set forth in claim 20 wherein said cam includes a third groove having a different peripheral lengths than said first and second grooves for receiving an anchor cable section.

22. A cam as set forth in claim 19 which includes means permitting an end of at least one of said cable sections to be lengthwise adjustably secured to the cam.

23. A cam as set forth in claim 22 wherein said means permitting an end of at least one of said cable sections to be lengthwise adjustably secured to the cam are anchor pins on the cam.

24. A cam as set forth in claim 19 wherein the means for feeding out the first and second cable sections as the bow is being drawn comprises the eccentric groove which takes up the anchor cable as the bow is being drawn.

25. A cam as set forth in claim 24 wherein the means for securing the ends of the first and second cable sections and the anchor cable to the cam is an anchor pin.

26. A cam as set forth in claim 19 wherein the means for feeding

out the first and second cable sections as the bow is being drawn comprises an additional groove in the cam.

27. A cam as set forth in claim 26 wherein the additional groove in the cam is eccentric.

28. A cam as set forth in claim 27 wherein the first and second cable sections are secured to a first pin on the cam.

29. A cam as set forth in claim 28 wherein the anchor cable section is secured to a second pin on the cam.

30. A cam as set forth in claim 21 wherein said third groove is located between said first groove and said second groove on the cam.

31. A compound archery bow as set forth in claim 1 wherein said anchor cable has two sections at one end thereon, and wherein each such section is mounted on opposite sides of said rotational member.

32. A compound archery bow as set forth in claim 31 wherein each such section includes loops for affixing each such section to an axle on which the rotational member is journaled.

33. A compound archery bow as set forth in claim 1 wherein said rotational member has a single peripheral groove portion therein.

34. An anchor cable for use in a compound archery bow having two sections at one end thereof each such section terminating in a loop for affixing one end of the cable to an end of said archery bow, and a loop at the other end of said cable for affixing said other end to the other end of said archery bow.

add 42 add 41 add 43 add 51